would be impossible to reach a fair estimate of it. In Salem, N. H., the crops and fruit trees on almost every farm were destroyed and one Salem farmer stated that the farms in his vicinity were practically ruined. Innumerable fruit trees were shorn of their budding fruit, corn and other crops were levelled to the ground, market gardens were riddled by the hail and hundreds of windows in farmhouses and barns were broken.

29.98
29.96
29.97
29.97
29.98
29.98
29.98
29.98
July 17, 1924, a.m.

phone lines were reported out of commission, an estimated total damage of \$15,000 occurred to four greenhouses (none of them insured and one of them, under construction, just nearing completion), while in a school building nearly all the window panes on the north side on two floors were broken.

The total damage from the hailstorm in Lawrence,

The total damage from the hailstorm in Lawrence, Methuen, and Salem is placed at \$75,000. Of this, some

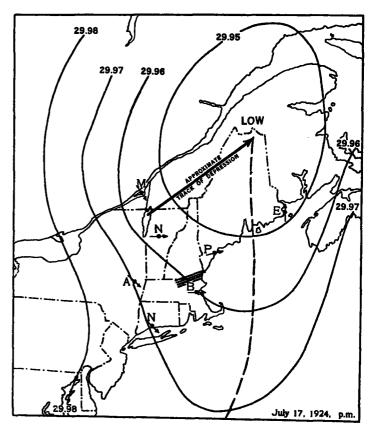


Fig. 1.—Pressures, wind directions and approximate positions of the wind shift line over New England at 8 a. m. and 8 p. m., July 17, 1924. The parallel lines on the 8 p. m. map in southeastern New Hampshire and northeastern Massachusetts show approximately the area within which occurred the damage noted in this and the preceding article

"In Boxford and North Andover the storm caused more damage than in Lawrence. The crops on many farms were riddled and leveled to the ground by the large hailstones, and fruit trees were ruined. The damage to crops and trees is estimated at several thousand dollars."

Though Lawrence appears to have suffered less from the hailstorm than the surrounding country, 500 tele\$50,000 is assigned to destroyed crops, including extensive injury to fruit on trees. Expense of remaking street grades, of which many on the hillier parts of Lawrence were badly washed out during the second storm, and of restoring storm sewers to working order, will add some thousands of dollars to the above sum.

WINDSTORMS IN WISCONSIN, AUGUST 7, 1924

By W. P. STEWART

[Weather Bureau, Milwaukee, Wis., Sept. 10, 1924]

Two tornadoes which formed almost simultaneously in west-central Wisconsin during the evening of August 7, 1924, caused seven fatalities and a property loss estimated at about \$300,000.

The first of these storms appeared in the vicinity of Osseo, Trempealeau County, about 6:30 p. m., moving from northwest to southeast. It was last reported near Black River Falls, Jackson County, about 27 miles southeast, half an hour later. The funnel-shaped cloud was seen by all observers. The width of the path of great destruction was variously estimated as from 1,000 feet to a mile. Four persons were killed, and many were more or less seriously injured. A few dwelling houses and a large number of farm buildings were destroyed.

The second tornado originated apparently a few miles northwest of New Auburn, Chippewa County, probably just north of the Barron County line. It moved from northwest to southeast and was first reported at 7:00 p. m. The funnel-shaped cloud was seen by many observers. The width of the path of great destruction was about 60 rods, and the length 8 to 10 miles. Three persons lost their lives and approximately 100 were injured. Several farm residences and a large number of other farm buildings were destroyed. The loss of crops from both of these tornadoes was heavy. It is not practicable to estimate the speed with which these storms moved, as the time is not reported with sufficient accuracy.